

The Outbreak Management System (OMS)



State of California
Sacramento, CA



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California Partnership with CDC

- Bi-weekly conference calls between
 - CA's Public Health Business Needs Evaluation Team
 - CDC's OMS Software Development Team
- Feedback to CDC for product improvement opportunities
 - BT and other outbreak requirements
 - OMS features and functions

Evaluation Subject Areas

- OMS Software and System Components
 - OMS Core Application (3 versions)
 - Supplemental Forms
 - Administration Manager
- OMS Functionality
 - Business Requirements
 - Usability Requirements

OMS Functionality Evaluation

- Business Requirements (BREQs)
 - Bi-weekly workshops with Subject Matter Experts
 - The business needs that must be met by outbreak management software
 - » Vaccine Preventable Disease outbreak SMEs
 - » Non-vaccine Preventable Disease outbreak SMEs
 - » Occupational and Environmental SMEs
 - Requirements Prioritization
 - » Gathered during OMS training by CDC in CA
 - » Determine critical, moderate, or low priority

OMS Activities in CA

- Application Environment
 - Loading and Testing
- Replication Environment
 - Loading and Executing
- Documentation Evaluation
- Simulated Outbreak Drill

Lessons Learned

Application Environment

- Technical Expertise Required
 - SQL Server Setup
 - OMS Application Setup
 - Building OMS_1_1 Databases
 - Working with Configuration Manager

Lessons Learned

Replication Environment

- Technical Expertise Required
 - Enabling SQL Replication Capability
 - Building Replication Tables (Publisher and Subscribers)
 - Running CDC Replication Scripts
 - Forcing Replication of existing data

Lessons Learned

Documentation Evaluation

- It is always a challenge to keep up with documentation on a software product that continues to evolve.
 - User Documentation is adequate; can be improved with clarifications and greater detail.
 - Technical Documentation needs work, especially in the Replication process.
 - SDM Documentation is well done; could use additional detail in a few areas.

Lessons Learned

Simulated Outbreak Drill

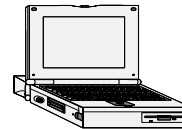
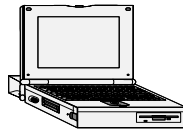
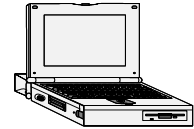
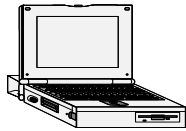
- Clinician Experts together with Technical Experts are Needed
 - Data from several different paper-based forms were used to populate the OMS database from a CA measles outbreak
 - A standardized paper form for each specific disease type is needed
 - OMS Supplemental Forms supported the data capture from CA's variety of paper-based data



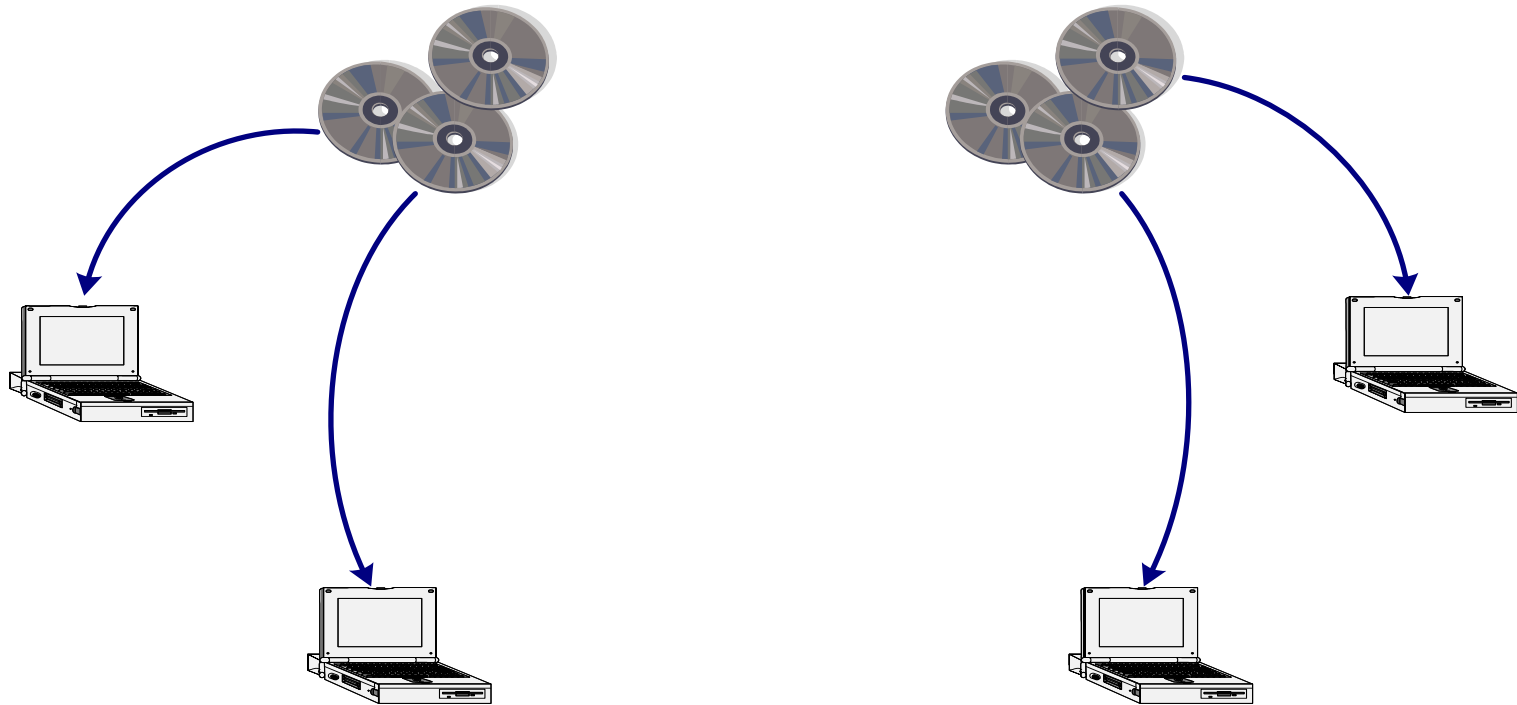
PHINishing up the Presentation

By Brent Hammond

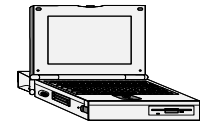
Outbreak Preparedness with OMS



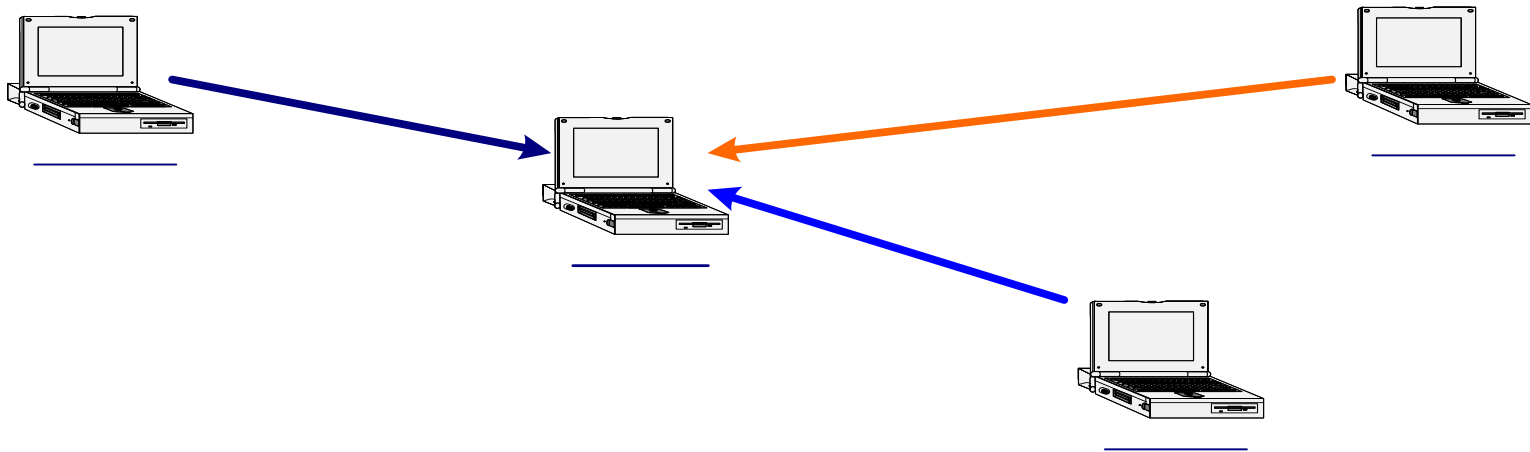
Prepared OMS Equipment



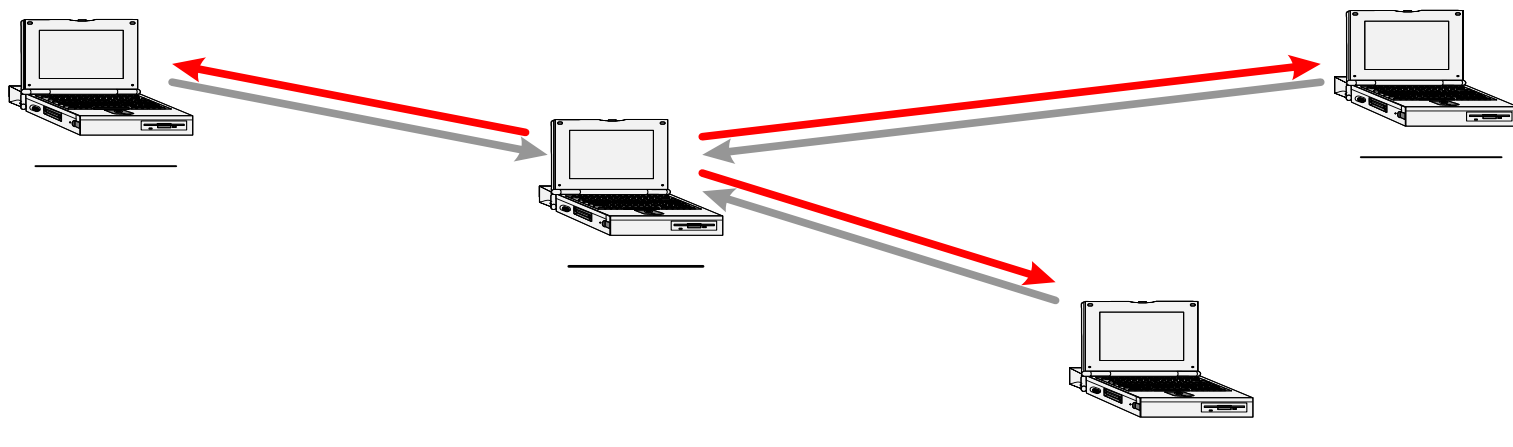
Basic Investigation Configuration



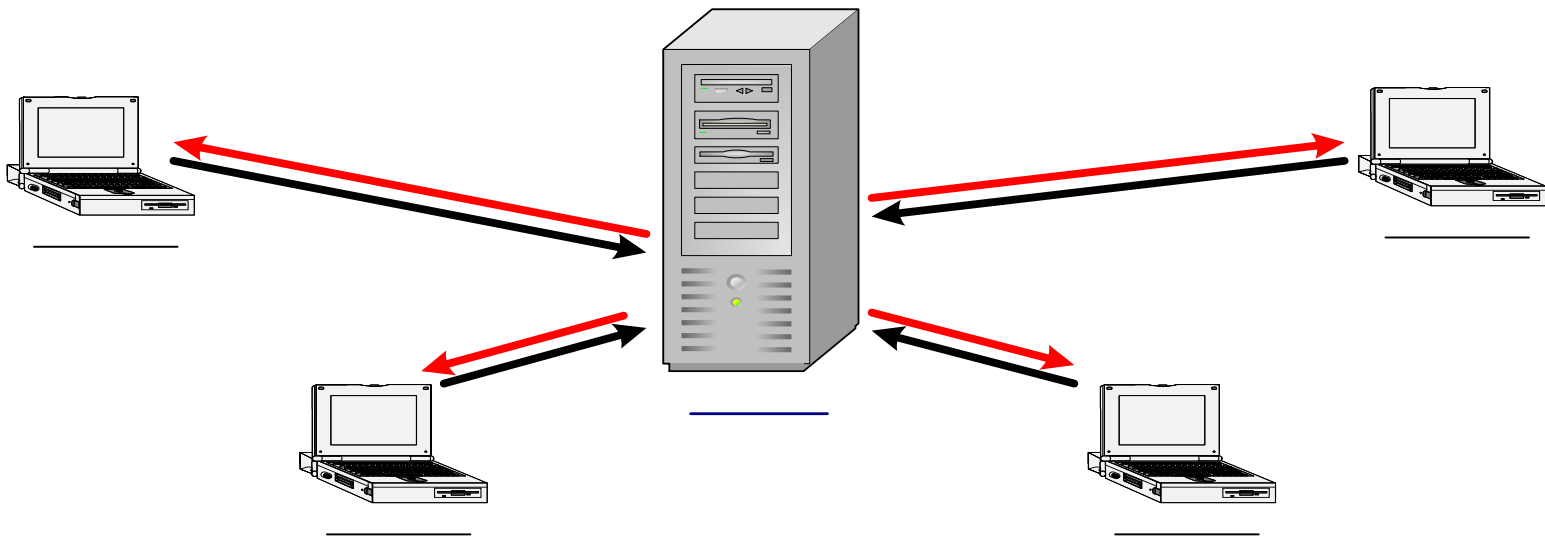
Basic Investigation Configuration



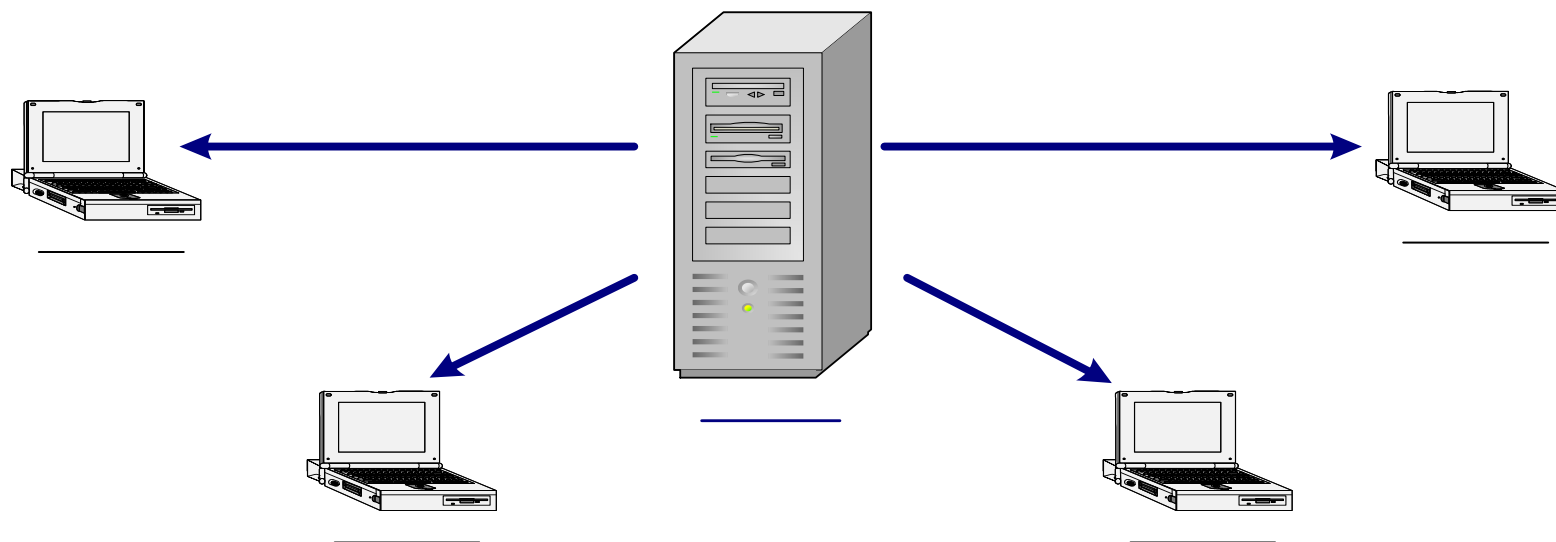
Basic Investigation Configuration



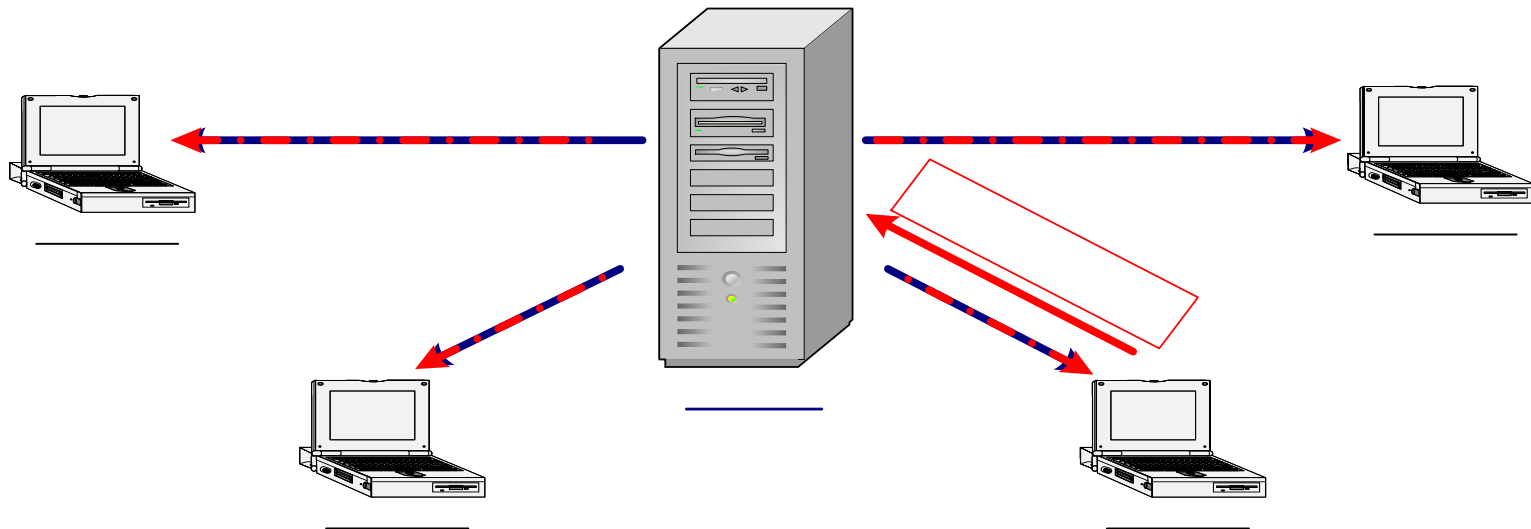
Dedicated OMS Server Configurations



Dedicated OMS Server Configurations

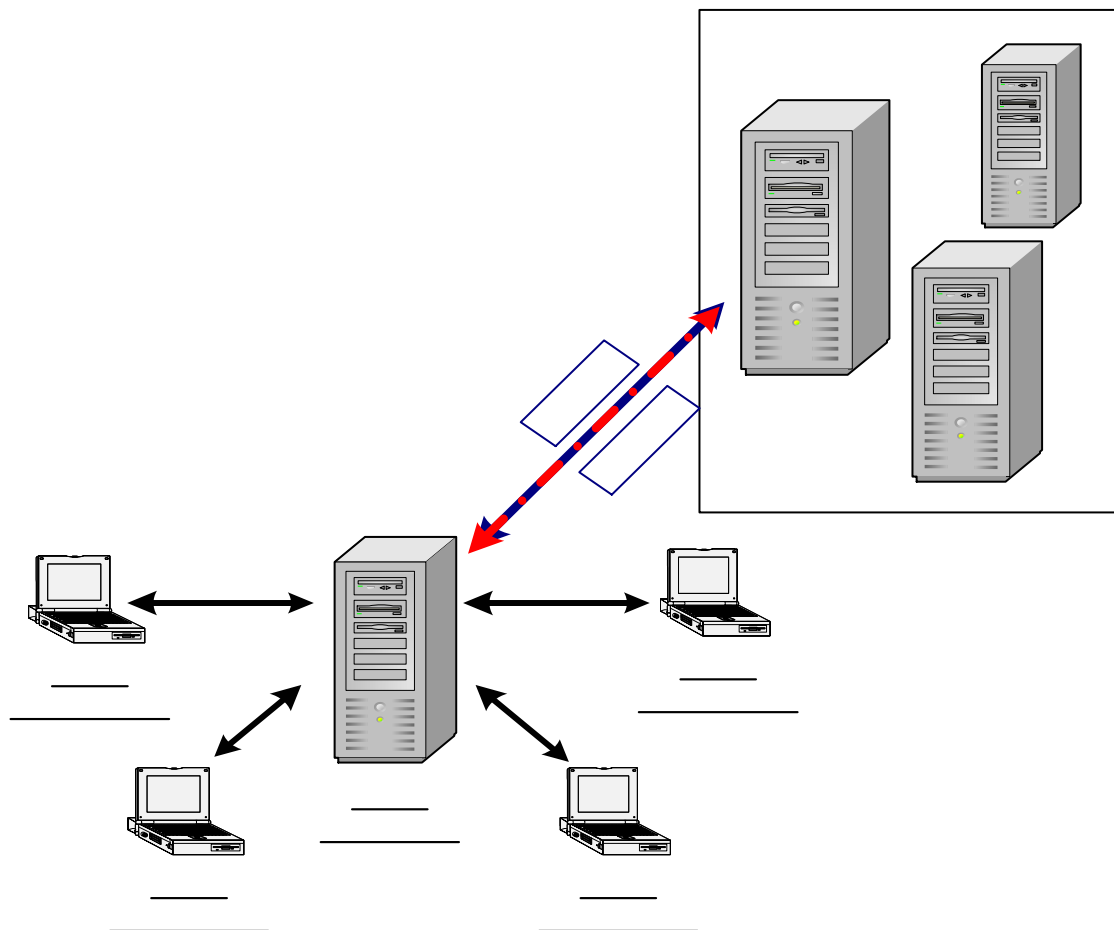


Dedicated OMS Server Configurations



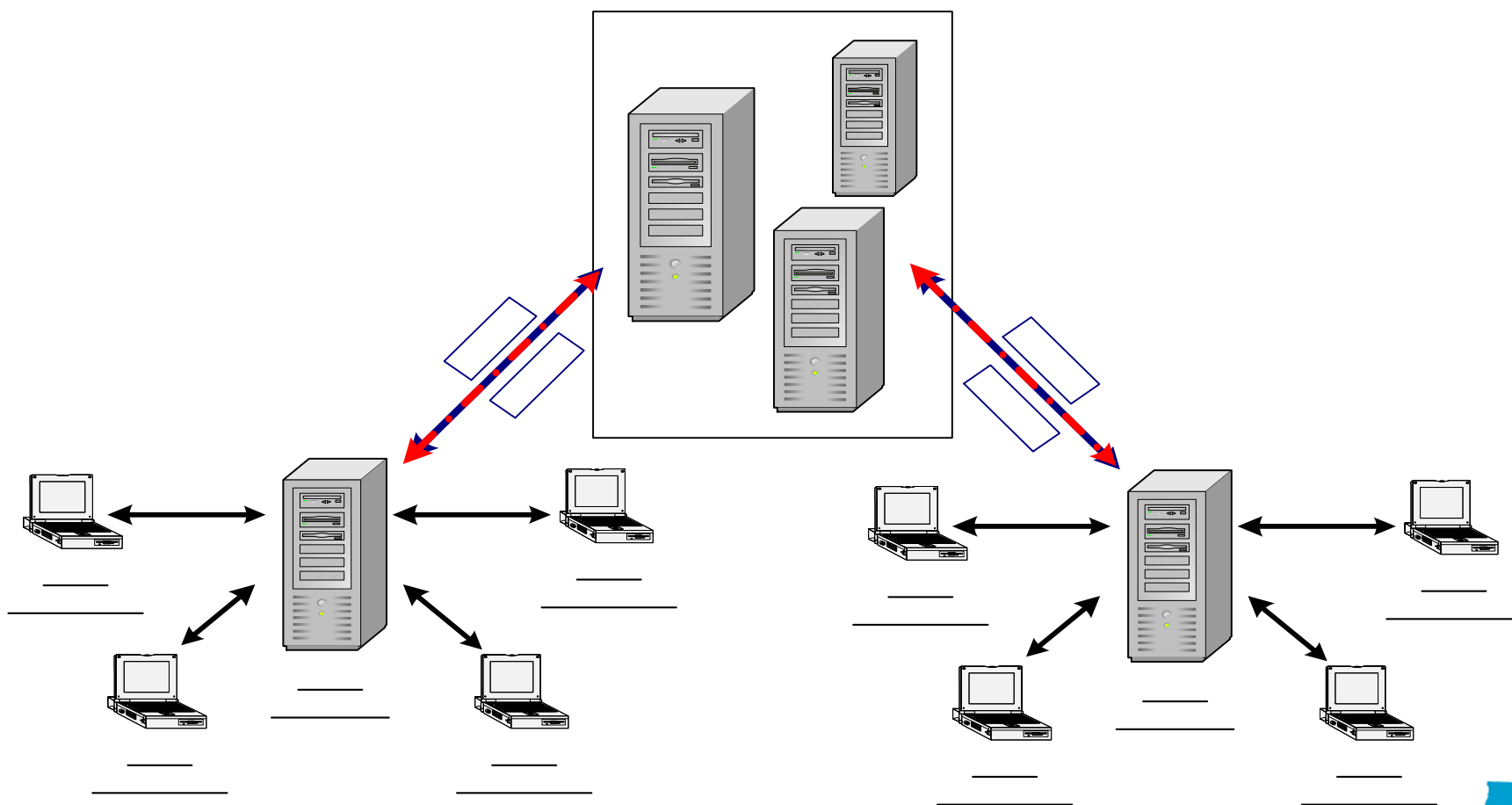
Sophisticated OMS Server Configurations...

Statewide / Regional Centralized OMS Server
Replicating with Local Health OMS Server



Sophisticated OMS Server Configurations...

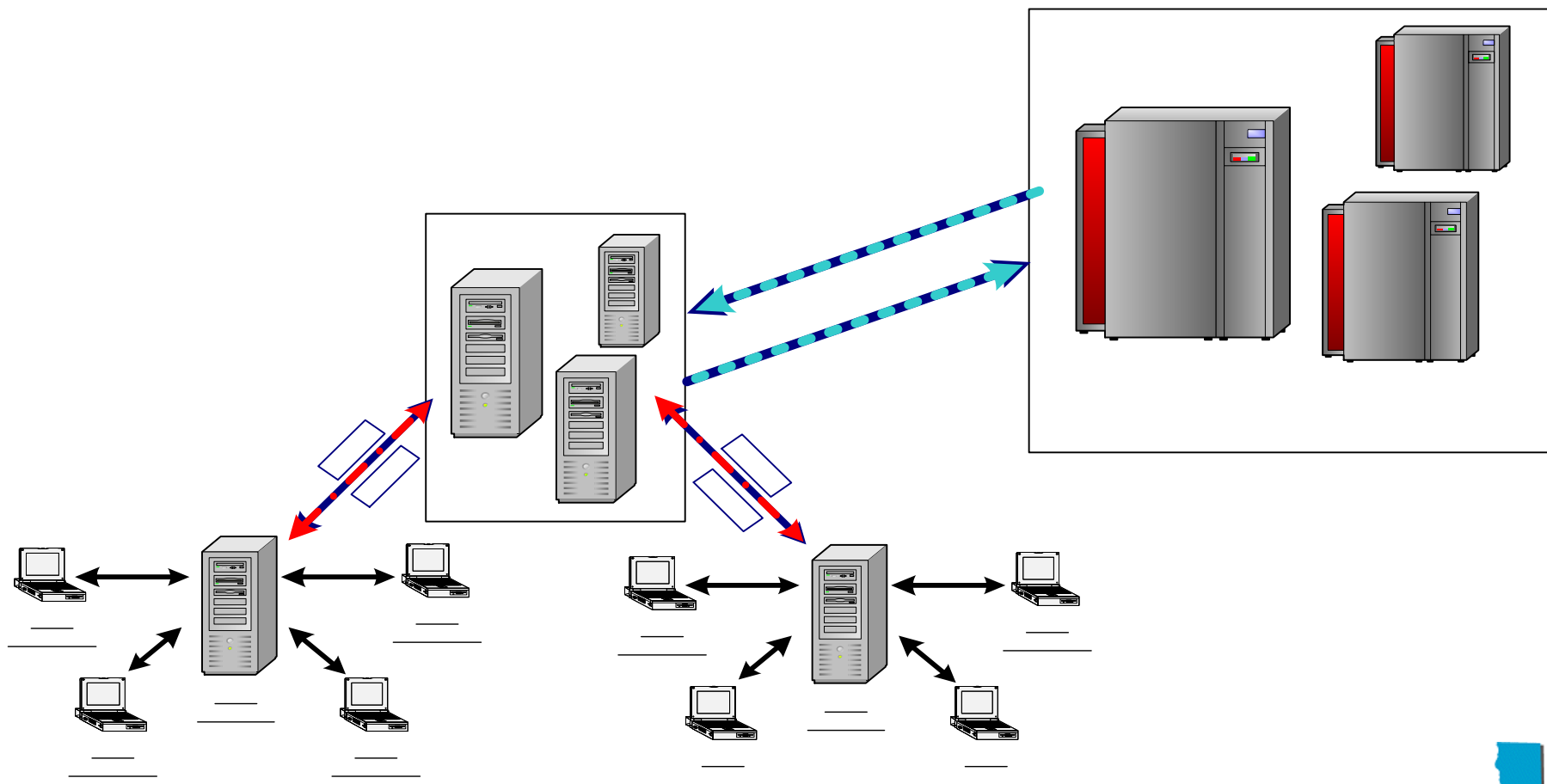
Statewide / Regional Centralized OMS Server
Replicating with Local Health OMS Servers
Facilitating Cross-Jurisdictional Analysis and Planning



Sophisticated OMS Server Configurations...

OMS Interfaced with Statewide Surveillance and/or Reporting Systems

* Data Imported from Surveillance Systems to Initiate Investigations *



QUESTIONS?

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